Attorney's Docket No.: 28955.4038

Applicant: Tetsuya INOUE, et al. Serial No.: Not yet assigned

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## Amendment to the Claims

What is claimed is:

1. (Original) A compound having a spiro bond represented by a following general formula (1):

$$(Sp - )_n X(-Y)_m$$
 (1)

wherein Sp is a group having a spiro bond represented by a following general formula (2):

wherein L represents a single bond, - (CR'R")  $_{\rm e}$  - , - (Si R' R")  $_{\rm e}$  - ,

R' and R" each independently represents a hydrogen atom, a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a substituted or unsubstituted heterocyclic group having 5 to 50 ring atoms, or a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms; e represents an integer of 1 to 10; further R' and R" may be the same with or different from each other;

Z represents a carbon atom, a silicon atom or a germanium atom;

Q represents a group forming a ring structure;

R represents a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a

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substituted or unsubstituted heterocyclic group having 5 to 50 ring atoms, a substituted or

unsubstituted alkyl group having 1 to 50 carbon atoms, a substituted or unsubstituted alkoxy

group having 1 to 50 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 50

carbon atoms, a substituted or unsubstituted aryloxy group having 5 to 50 ring atoms, a

substituted or unsubstituted arylthic group having 5 to 50 ring atoms, a substituted or

unsubstituted alkoxycarbonyl group having 2 to 50 carbon atoms, a carboxyl group, a halogen

atom, a cyano group, a nitro group or a hydroxyl group; when there are plural of R, they may be

the same with or different from each other and they may be bond with each other to form a ring

structure; a and b each independently represents an integer of 0 to 4;

X represents a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a

substituted or unsubstituted condensed aromatic ring group having 12 to 20 ring carbon atoms, a

substituted or unsubstituted aromatic heterocyclic group having 5 to 50 ring atoms or a group

formed by combining plural of the preceding groups; excluding a case where X is an

anthracendiyl group or a polyanthracendiyl group;

Y represents a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms and

may further having a vinyl-bond and still further may contain a group having a spiro bond

represented by the general formula (2);

n represents an integer of 1 to 4;

m represents an integer of 1 to 2; and

when Sp in the general formula (1) is a spirobifluorenyl group, a case where X has a backbone

structure selected from a group consisting of pyrenylene backbone structure, chrysenylene

backbone structure and phenanthlene backbone structure is excluded:

2. (Original) The compound having a spiro bond according to Claim 1, wherein Sp in

the general formula (1) is represented by the following general formula (3):

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$$(R)a$$

$$A_1$$

$$A_2$$

$$A_3$$

$$A_3$$

$$A_4$$

$$A_3$$

$$A_4$$

$$A_3$$

$$A_4$$

$$A_3$$

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$$A_4$$

$$A_4$$

$$A_5$$

$$A_4$$

$$A_4$$

$$A_5$$

$$A_4$$

$$A_5$$

$$A_4$$

$$A_5$$

$$A_7$$

$$A_8$$

wherein R represents a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a substituted or unsubstituted heterocyclic group having 5 to 50 ring atoms, a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms, a substituted aralkyl group having 7 to 50 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 50 carbon atoms, a substituted or unsubstituted aryloxy group having 5 to 50 ring atoms, a substituted or unsubstituted arylthic group having 5 to 50 ring atoms, a substituted or unsubstituted arylthic group having 5 to 50 ring atoms, a substituted or unsubstituted arylthic group having 5 to 50 ring atoms, a substituted or unsubstituted alkoxycarbonyl group having 2 to 50 carbon atoms, a carboxyl group, a halogen atom, a cyano group, a nitro group or a hydroxyl group;

L represents a single bond, - (CR'R")  $_{e}$  - , - (SiR'R")  $_{e}$  - , - O - ,

a and b each independently represents an integer of 0 to 4;

A<sub>1</sub> to A<sub>4</sub> each independently represents - CR'R" - , - SiR'R" - , - O - ,

R' and R" each independently represents a hydrogen atom, a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a substituted or unsubstituted heterocyclic group having 5 to 50 ring atoms, or a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms; R' and R" may be the same with or different from each other and they may bond with each other to form a ring structure; and

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p represents an integer of 1 to 10.

3. (Original) The compound having a spiro bond according to Claim 2, wherein at least two adjacent components among  $A_1$  to  $A_4$  in the general formula (3) each represents - CR'R'' -; R' and R'' each independently represents a hydrogen atom, a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a substituted or unsubstituted heterocyclic group having 5 to 50 ring atoms, or a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms; R' and R'' may be the same with or different from each other and they may bond with each other to form a ring structure; and

the adjacent R's, the adjacent R"s or both R' and R" will bond saturatedly or unsaturatedly forming a ring structure having 4 to 50 carbon atoms as a result.

4. (Original) The compound having a spiro bond according to Claim 1, wherein Sp is a group represented by any one of the following general formulae (4) to (7):

wherein R represents a substituted or unsubstituted aromatic group having 6 to 50 ring carbon

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atoms, a substituted or unsubstituted heterocyclic group having 5 to 50 ring atoms, a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 50 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 50 ring atoms, a substituted or unsubstituted aryloxy group having 5 to 50 ring atoms, a substituted or unsubstituted arylthio group having 5 to 50 ring atoms, a substituted or unsubstituted alkoxycarbonyl group having 2 to 50 carbon atoms, a carboxyl group, a halogen atom, a cyano group, a nitro group or a hydroxyl group; when there are plural of R, they may be the same with or different from each other and they may be bond with each other to form a ring structure; and R<sub>1</sub> to R<sub>16</sub> each independently represents a hydrogen atom, a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a substituted or unsubstituted heterocyclic group having 5 to 50 ring atoms, a substituted or unsubstituted alkyl group having 1 to 50 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 50 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 50 carbon atoms, a substituted or unsubstituted aryloxy group having 5 to 50 ring atoms, a substituted or unsubstituted arylthio group having 5 to 50 ring atoms, a substituted or unsubstituted alkoxycarbonyl group having 2 to 50 carbon atoms, a carboxyl group, a halogen atom, a cyano group, a nitro group or a hydroxyl group; at least two among R<sub>1</sub> to R<sub>16</sub> may bond each other to form a ring structure;

a, b, c and d each represents an integer of 0 to 4 respectively;

p, q, r and s each represents an integer number of 1 to 10 respectively;

wherein X is a group represented by any one of the following general formulae (8) to (25) or a group made by combining at least two of groups represented by the following general formulae (8) to (25):

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$$(R)a \qquad (R)b \qquad x \qquad (R)a \qquad (R)b \qquad (R)c \qquad (R)c \qquad (R)a \qquad (R)b \qquad (R)c \qquad (R)a \qquad (R)b \qquad (R)c \qquad (R)a \qquad (R)b \qquad (R)c \qquad (R)c \qquad (R)a \qquad (R)b \qquad (R)c \qquad (R)c \qquad (R)a \qquad (R)b \qquad (R)c \qquad (R)c$$

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$$(20) \qquad (21) \qquad (22) \qquad (23)$$

$$(24) \qquad (25) \qquad (25)$$

wherein R,  $R_1$  to  $R_{16}$ , a to d and p to s are the same as the foregoing description;

wherein Ar represents a substituted or unsubstituted aromatic group having 6 to 50 ring carbon atoms, a substituted or unsubstituted aromatic heterocyclic group having 5 to 50 ring atoms, or a group made by combining plural of those preceding groups; excluding a case where Ar is an anthracendiyl group or a polyanthracendiyl group;

n' represents an integer of 0 to 5;

x represents an integer of 1 to 20; and

when Sp is a group represented by the general formula (7), a case where X is a group represented by any one of the general formulae (9) to (11) is excluded.

5. (Original) The organic electroluminescence device according to Claim 4, wherein Y in the general formula (1) is a group represented by a general formula (26):

$$Ar_1$$
 $Ar_2$ 
(26)

wherein Ar<sub>1</sub> and Ar<sub>2</sub> each independently represents a substituted or unsubstituted aromatic group

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having 6 to 50 ring carbon atoms respectively and further, Ar<sub>1</sub> and Ar<sub>2</sub> may be the same with or

different from each other.

6. (Currently Amended) A compound having a spiro bond according to any one of Claims 1

to 5, claim 1, which is a light emitting material for an organic electroluminescence device.

7. (Currently Amended) A material for forming a luminous coated film which comprises

the compound having a spiro bond according to any one of Claims 1 to 5.claim 1.

8. (Currently Amended) An organic electroluminescence device which comprises at least

one organic thin film layer sandwiched between a pair of electrode consisting of an anode and a

cathode, wherein the organic thin film layer comprises the compound having a spiro bond

according to any one of Claims 1 to 5. claim 1.

9. (Original) The organic electroluminescence device according to Claim 8, wherein

said light emitting layer comprises the compound having a spiro bond.

10. (Original) The organic electroluminescence device according to Claim 8, which

emits bluish light.

11. (Original) The organic electroluminescence device according to Claim 9, which

emits bluish light.